IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Geoffrey B. Rhoads

Serial No.: 10/617,571

Filed: July 11, 2003

Examiner:

For: VIDEO STEGANOGRAPHY

Date: December 15, 2003

Art Unit 2621

CERTIFICATE OF MAILING

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William Y. Conwell

Attorney for Applicant

INFORMATION DISCLOSURE STATEMENT

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Applicants submit herewith information of which they are aware, and which they believe may be material to the examination of the application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. § 1.56. The information is listed on the attached Form PTO-1449.

The attached Form PTO-1449 lists information previously cited in parent application 09/872,199, filed May 31, 2001. Applicant relies on these applications to establish an earlier effective filing date of this application under 35 U.S.C. § 120. Therefore, pursuant to 37 C.F.R. § 1.98(d), applicant has listed this information without supplying copies of the information itself.

The submission of information on the attached Form PTO-1449 is not intended as an admission that any such information constitutes prior art against the claims of the application under examination. Applicants do not waive any right to take any appropriate action to antedate or otherwise remove any information from the attached Form PTO-1449.

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Date: December 15, 2003

CUSTOMER NUMBER 23735

Phone: 503-885-9699 FAX 503-885-9880 Respectfully submitted,

DIGIMARC/CORPORATION

By William Y. Conwell

Registration No. 31,943



US Patent Documents				
Ex'r Initial	Number	Date	Inventor	Class
	2630525	3/3/53	Tomberlin et al.	
	2881244	4/7/59.	Pawley et al.	
	3004104	10/10/1961	Hembrooke	
	3406344	10/15/1968	Hopper	1
	3493674	2/3/1970	Houghton	
	3562420	2/9/71	Thompson	
	3569619	3/9/1971	Simjian	
	3576369	4/27/1971	Wick	
	3583237	6/8/71	Bayha	
	3585290	6/15/1971	Sanford	
	3638188	1/25/72	Pincoffs	
	3665162	4/11/1972	Yamamoto et al.	
	3703628	11/21/1972	Philipson, Jr.	
	3805238	4/16/1974	Rothfjell	
	3805286	4/16/74	Kavanagh et al.	
	3809806	5/7/1974	Walker et al.	
	3838444	9/24/74	Loughlin et al.	
	3845391	10/29/74	Crosby	
	3885217	5/20/75	Cintron	
	3885217	5/20/75	Cintron	
	3894190	7/8/75	Gassmann	
	3894190	7/8/75	Gassmann	
	3900890	8/19/75	Eibner	
	3914877	10/28/1975	Hines	
	3922074	11/25/1975	Ikegami et al.	
	3969830	7/20/76	Grasham	
	3971917	7/27/1976	Maddox et al.	
	3977785	8/31/1976	Harris	
	3982064	9/21/1976	Barnaby	
	3984624	10/5/76	Waggener	
	4025851	5/24/1977	Haselwood et al.	
	4048619	9/13/77	Forman, Jr. et al.	
	4079419	3/14/78	Siegle et al.	
	4079419	3/14/78	Siegle et al.	
	4086634	4/25/78	Cook	
	4086634	4/25/78	Cook	
	4122501	10/24/78	Sordello et al.	

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STATEMENT

 Docket:
 P0854
 Ser. No. 10/617,571

 Applicant:
 Rhoads

 Filed:
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 Group: 2621

	4184700	1/22/1980	Greenaway	·· ·
	4225967	9/30/80	Miwa et al.	
	4230990	10/28/80	Lert, Jr. et al.	
	4231113	10/28/80	Blasbalg	
	4237484	12/2/80	Brown et al.	
	4238849	12/9/80	Gassmann	
	4245346	1/13/81	Grady et al.	
	4245346	1/13/81	Grady et al.	
	4252995	2/24/1981	Schmidt et al.	
	4262329	4/18/1981	Bright et al.	
	4307899	12/29/81	Норре	
	4310180	1/12/82	Mowry, Jr. et al.	
	4313197	1/26/82	Maxemchuk	
	4323921	4/6/82	Guillou	
	4333113	6/1/82	Kalinowski	
	4333113	6/1/82	Kalinowski	
	4337483	6/29/82	Guillou	
	4351547	9/28/82	Brooks II	
	4367488	1/4/83	Leventer et al.	
	4379947	4/12/83	Warner	
	4380027	4/12/1983	Leventer et al.	
	4389671	6/21/83	Posner et al.	
	4395600	7/26/1983	Lundy et al.	
	4416001	11/15/1983	Ackerman	
	4423415	12/27/1983	Goldman	· · · · · · · · · · · · · · · · · · ·
	4425642	1/10/84	Moses et al.	
	4425661	1/10/84	Moses et al.	
	4476468	10/9/1984	Goldman	
	4504084	3/12/85	Jauch	
	4512013	4/15/85	Nash et al.	
	4512013	4/15/85	Nash et al.	
	4523311	6/11/85	Lee et al.	
	4523311	6/11/85	Lee et'al.	
	4528588	7/9/85	Löfberg	
	4532508	7/30/1985	Ruell	
	4547804	10/15/1985	Greenberg	
	4553261	11/12/1985	Froessl	
	4590366	5/26/1986	Rothfjell	
	4593389	6/3/86	Wurzburg et al.	
	4593389	6/3/86	Wurzburg et al.	

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4595950	6/17/1986	Lofberg	· · · · · · · · · · · · · · · · · · ·
4637051	1/13/1987	Clark	7
4639779	1/27/1987	Greenberg	
4644582	2/17/87	Morishita et al.	
4644422	2/17/87	Bedini	
4644422	2/17/87	Bedini	
4647974	3/3/1987	Butler et al.	
4654867	3/31/1987	Labedz et al.	
4660221	4/21/1987	Dlugos	
4663518	5/5/1987	Borror et al.	
4665431	5/12/1987	Cooper	-
4672605	6/9/87	Hustig et al.	
4675746	6/23/1987	Tetrick et al.	
4677435	6/30/1987	Causse D'Agraives et al.	***************************************
4677466	6/30/87	Lert, Jr. et al.	
4677466	6/30/87	Lert, Jr. et al.	
4678322	7/7/87	Finket et al.	
4682794	7/28/1987	Margolin	
4697209	9/29/87	Kiewit et al.	
4703476	10/27/87	Howard	····
4712103	12/8/1987	Gotanda	
4718106	1/5/1988	Weinblatt	
4739377	4/19/1988	Allen	
4750173	6/7/88	Blüthgen	
4765656	8/23/1988	Becker et al.	
4776013	10/4/1988	Kafri et al.	· .
4777529	10/11/88	Schultz et al.	
4777529	10/11/88	Schultz et al.	
4791449	12/13/88	Foley et al.	
4805020	2/14/1989	Greenberg	,
4807031	2/21/1989	Broughton et al.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4811357	3/7/1989	Betts et al.	
4811408	3/26/1989	Goldman	
4820912	4/11/1989	Samyn	
4835517	5/30/1989	van der Gracht et al.	
4855827	8/8/89	Best	
4864618	9/5/1989	Wright et al.	
4866771	9/12/89	Bain	
4874936	10/17/1989	Chandler et al.	
4876617	10/24/89	Best et al.	

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4879747 4884139 4885632 4885757 4903301 4908836 4908873 4914700 4918484 4920503 4921278 4939515 4941150	11/7/1989 11/28/1989 12/5/1989 12/5/89 2/20/1990 3/13/90 3/13/1990 4/3/90 4/17/1990 4/24/90 5/1/1990 7/3/90	Leighton et al. Pommier Mabey et al. Provence Kondo et al. Rushforth et al. Philibert et al. Alasia Ujiie Cook Shiang et al.	
1885632 1885757 1903301 1908836 1908873 1914700 1918484 1920503 1921278	12/5/1989 12/5/89 2/20/1990 3/13/90 3/13/1990 4/3/90 4/17/1990 4/24/90 5/1/1990	Mabey et al. Provence Kondo et al. Rushforth et al. Philibert et al. Alasia Ujiie Cook	
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1903301 1908836 1908873 1914700 1918484 1920503 1921278 1939515	2/20/1990 3/13/90 3/13/1990 4/3/90 4/17/1990 4/24/90 5/1/1990	Kondo et al. Rushforth et al. Philibert et al. Alasia Ujiie Cook	
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4908873 4914700 4918484 4920503 4921278 4939515	3/13/1990 4/3/90 4/17/1990 4/24/90 5/1/1990	Philibert et al. Alasia Ujiie Cook	
1914700 1918484 1920503 1921278 1939515	4/3/90 4/17/1990 4/24/90 5/1/1990	Alasia Ujiie Cook	
1918484 1920503 1921278 1939515	4/17/1990 4/24/90 5/1/1990	Ujiie Cook	
4920503 4921278 4939515	4/24/90 5/1/1990	Cook	
1921278 1939515	5/1/1990		-
1939515		Shiang et al.	1
~	7/3/90		
1941150	113130	Adelson	-
	7/10/90	Iwasaki	
1943973	7/24/90	Werner	
1943976	7/24/90	Ishigaki	.=
1944036	7/24/1990	1	
1945412	7/31/90	Kramer	
4945412	7/31/90	Kramer	
1949381	8/14/90	Pastor	
1963998	10/16/90	Maufe	
1965827	10/23/1990	McDonald	
1965680	10/23/90	Endoh	
1967273	10/30/1990	Greenberg	
1969041	11/6/90	O'Grady et al.	
1972471	11/20/90	Gross et al.	
1972475	11/20/1990	Sant'Anselmo	
1972476	11/20/1990	Nathans	-
1979210	12/18/90	Nagata et al.	
1980782	12/25/90	Ginkel	
1993068	2/12/1991	Piosenka et al.	
1996530	2/26/1991	Hilton	*
5003590	3/26/1991	Lechner et al.	
5010405	4/23/1991	Schreiber et al.	
5018767	5/28/91	Wicker	
5027401	6/25/1991	Soltesz	
5034982	7/23/1991	Heninger et al.	
5036513	7/30/1991	Greenblatt	
5040059		Leberl	
			
	943976 944036 944036 945412 949381 963998 965827 965680 967273 969041 972471 972476 972476 9972476 9972476 993068 996530 003590 010405 010405 018767 027401 034982 036513	.943976 7/24/90 .944036 7/24/1990 .945412 7/31/90 .949381 8/14/90 .949382 10/16/90 .965827 10/23/1990 .96580 10/23/1990 .965680 10/30/1990 .969041 11/6/90 .972471 11/20/1990 .972475 11/20/1990 .979210 12/18/90 .980782 12/25/90 .993068 2/12/1991 .996530 2/26/1991 .003590 3/26/1991 .010405 4/23/1991 .034982 7/23/1991 .036513 7/30/1991 .040059 8/13/91 .063446 11/5/91	1943976 7/24/1990 Ishigaki 1944036 7/24/1990 Hyatt 1945412 7/31/90 Kramer 1945412 7/31/90 Kramer 1949381 8/14/90 Pastor 1963998 10/16/90 Maufe 1965827 10/23/1990 McDonald 1965680 10/23/90 Endoh 1965680 10/23/90 Greenberg 1966041 11/6/90 O'Grady et al. 1972471 11/20/1990 Gross et al. 1972475 11/20/1990 Sant'Anselmo 1972476 11/20/1990 Nagata et al. 1980782 12/18/90 Nagata et al. 19980782 12/25/90 Ginkel 1993068 2/12/1991 Piosenka et al. 1996530 2/26/1991 Hilton 1003590 3/26/1991 Lechner et al. 1010405 4/23/1991 Schreiber et al. 1027401 6/25/1991 Soltesz 1034982 7/23/1991 Heninger et a

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5	073925	12/17/1991	Nagata et al.	T
5	075773	12/24/91	Pullen et al.	
5	077608	12/31/1991	Dubner	
5	077795	12/31/1991	Rourke et al.	
5	079648	1/7/92	Maufe	
	083224	1/21/92	Hoogendoorn et al.	
5	083310	1/21/92	Drory	
5	087507	2/11/92	Heinzer	
5	091966	2/25/1992	Bloomberg et al.	
5	093867	3/3/92	Hori et al.	
5	095196	3/10/1992	Miyata	
	103459	4/7/92	Gilhousen et al.	
	113437	5/12/92	Best et al.	
	128525	7/7/1992	Stearns et al.	
	134496	7/28/92	Schwab et al.	
5	136436	8/4/92	Kahlman	
5	144660	9/1/1992	Rose	
	144658	9/1/92	Takahashi	
5	146457	9/8/92	Veldhuis et al.	
5	148498	9/15/1992	Resnikoff et al.	
5	150409	9/22/1992	Elsner	
5	157726	10/20/92	Merkle et al.	
5	161210	11/3/92	Druyvesteyn et al.	
5	166676	11/24/1992	Milheiser	
5	168147	12/1/1992	Bloomberg	
5	181786	1/26/1993	Hujink	
5	185736	2/9/1993	Tyrrell et al.	130
5	193853	3/16/93	Wicker	
5	199081	3/30/1993	Saito et al.	
5	200822	4/6/93	Bronfin et al.	
5	208630	5/4/93	Goodbrand et al.	
5	212551	5/18/93	Conanan	
5	213337	5/25/1993	Sherman	
5	216724	6/1/93	Suzuki et al.	
	221833	6/22/93	Hecht	
5	228056	7/13/93	Schilling	
	231663	7/27/93	Earl et al.	
	243411	9/7/1993	Shirochi et al.	
	243423	9/7/93	DeJean et al.	

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	5245165	9/14/1993	Zhang	
	5245329	9/14/1993	Gokcebay	
	5247364	9/21/1993	Banker et al.	
	5253078	10/12/1993	Balkanski et al.	
	5254196	10/19/93	Abowitz et al.	·
	5257119	10/26/93	Funada et al.	
	5259025	11/2/1993	Monroe	
	5258998	11/2/93	Koide	
	5262860	11/16/93	Fitzpatrick et al.	
	5267334	11/30/1993	Normille et al.	1
	5278400	1/11/94	Appel	
	5280537	1/18/94	Sugiyama et al.	
	5285498	2/8/94	Johnston	
	5287407	2/15/94	Holmes	
	5291243	3/1/94	Heckman et al.	
	5293399	3/8/1994	Hefti	
	5295203	3/15/1994	Krause et al.	
	5299019	3/29/1994	Pack et al.	
	5301257	4/5/94	Tani	
	5305400	4/19/1994	Butera	
<u> </u>	5315448	5/24/94	Ryan	-
	5319453	6/7/1994	Copriviza	<u> </u>
	5319724	6/7/1994	Blonstein et al.	
	5319735	6/7/94	Preuss et al.	
	5319475	6/7/94	Kay et al.	
	5321470	6/14/94	Hasuo et al.	
	5321773	6/14/94	Kopec et al.	
	5325167	6/28/1994	Melen	
	5327237	7/5/94	Gerdes et al.	
	5335277	8/2/94	Harvey et al.	1
	5335312	8/2/94	Meketa et al.	
	5337361	8/9/94	Wang et al.	
	5337362	8/9/1994	Gormish et al.	
	5349655	9/20/1994	Mann	
	5351302	9/27/1994	Leighton et al.	
	5365586	11/15/94	Indeck et al.	
	5369261	11/29/94	Shamir	
	5371792	12/6/1994	Asai et al.	
	5374976	12/20/94	Spannenburg	

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	375886	12/27/94	Tsuchiya	
	379345	1/3/95	Greenberg	
	379093	1/3/95	Hashimoto et al.	
	5387941	2/7/95	Montgomery et al.	
	5390003	2/14/95	Yamaguchi et al.	***
	5390185	2/14/95	Hooijmans et al.	
	390259	2/14/95	Withgott et al.	
-	5390185	2/14/95	Hooijmans et al.	
	394274	2/28/95	Kahn	
	396559	3/7/1995	McGrew	
	5398283	3/14/1995	Virga	
	5404160	4/4/95	Schober et al.	
:	5404377	4/4/95	Moses	
	5408542	4/18/1995	Callahan	
	5408258	4/18/95	Kolessar	
	5408505	4/18/95	Indeck et al.	
	5410598	4/25/95	Shear	-
	5412718	5/2/95	Narasimhalu et al.	
	5412731	5/2/95	Desper	-
	5418853	5/23/95	Kanota et al.	
	422963	6/6/1995	Chen et al.	
	5422995	6/6/1995	Aoki et al.	1
	5425100	6/13/95	Thomas et al.	
	5424807	6/13/95	Ohmura	·
	5426710	6/20/95	Suzuki et al.	
	5428606	6/27/1995	Moskowitz	
	5428607	6/27/1995	Hiller et al.	
	5428598	6/27/95	Veldhuis et al.	
	5428598	6/27/95	Veldhuis et al.	<u> </u>
	5432542	7/11/1995	Thibadeau et al.	
	5432870	7/11/1995	Schwartz	
:	5434649	7/18/95	Hasuo et al.	
	5436653	7/25/95	Ellis et al.	•
	5437897	8/1/95	Tanaka et al.	1
	5444779	8/22/95	Daniele	
	5446273	8/29/1995	Leslie	1
	5446488	8/29/1995	Vogel	1
	5449895	9/12/95	Hecht et al.	
	5450122	9/12/1995	Keene	
	5450490	9/12/95	Jensen et al.	

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-	5449896	9/12/95	Hecht et al.	
	5450489	9/12/95	Ostrover et al.	
	5453968	9/26/95	Veldhuis et al.	
	5461426	10/24/95	Limberg et al.	
	5461426	10/24/95	Limberg	
	5469506	11/21/1995	Berson et al.	
	5469222	11/21/95	Sprague	
+	5473631	12/5/1995	Moses	
	5479168	12/26/1995	Johnson et al.	
	5481294	1/2/1996	Thomas et al.	
	5481334	1/2/96	Arimoto et al.	
	5483276	1/9/96	Brooks et al.	
	5488664	1/30/1996	Shamir	
	5488664	. 1/30/1996	Shamir	
	5495282	2/27/96	Mostafa et al.	
	5495581	2/27/96	Tsai	
	5499294	3/12/1996	Friedman	
	5500856	3/19/96	Nagase et al.	
	5504518	4/2/96	Ellis et al.	
	5510900	4/23/96	Shirochi et al.	
	5513011	4/30/96	Matsumoto et al.	
	5513260	4/30/96	Ryan	
	5515081	5/7/1996	Vasilik	-
	5515451	5/7/96	Tsuji et al.	
	5521372	5/28/96	Hecht et al.	
	5523853	6/96	Yamashita et al.	
	5524933	6/11/96	Kunt et al.	
	5526427	6/11/96	Thomas et al.	
	5530751	6/25/96	Morris	
	5530759	6/25/96	Braudaway et al.	
	5530655	6/25/96	Lokhoff et al.	
	5530655	6/25/96	Lokhoff et al.	
	5532920	7/2/1996	Hartrick et al.	
	5537216	7/16/96	Yamashita et al.	
	5537223	7/16/1996	Curry	
	5539471	7/23/96	Myhrvold et al.	
	5539735	7/23/1996	Moskowitz	
	5541662	7/30/1996	Adams et al.	-
	5541741	7/30/96	Suzuki	-
	5544255	8/6/1996	Smithies et al.	

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5548646	8/20/1996	Aziz et al.	
5557333	9/17/1996	Jungo et al.	
5559559	9/24/96	Jungo et al.	
 5568179	10/22/1996	Diehl et al.	10/22/1996
5568268	10/22/96	Tsuji et al.	
5568570	10/22/96	Rabbani	
5572010	11/5/1996	Petrie	
 5572247	11/5/1996	Montgomery et al.	
 5572246	11/5/96	Ellis et al.	
5574787	11/12/96	Ryan	
5576532	11/19/96	Hecht	
5579124	11/26/96	Aijala et al.	
 5582103	12/1996	Tanaka et al.	
5590197	12/1996	Chen et al.	
 5581800	12/3/96	Fardeau et al.	
 5581658	12/3/96	O'Hagan et al.	
5583614	12/10/96	Hasuo et al.	
5587743	12/24/1996	Montgomery et al.	
5602920	02/1997	Bestler et al.	
5606609	2/25/1997	Houser et al.	
5611575	03/1997	Petrie	
 5613004	03/1997	Cooperman et al.	
5613012	03/1997	Hoffman	
5613004	03/1997	Cooperman et al.	
5612943	3/18/97	Moses et al.	
5614940	3/25/1997	Cobbley et al.	
5617148	4/1/1997	Montgomery	
5617119	4/1/97	Briggs et al.	
 5629770	05/1997	Brassil	
 5629770	05/1997	Brassil	
5627655	5/6/97	Okamoto et al.	
5629980	5/13/97	Stefik et al.	
5638443	06/1997	Stefik et al.	
5638446	06/1997	Rubin	
 5636292	6/3/97	Rhoads	
5636292	6/3/97	Rhoads	
5646997	7/8/97	Barton	
 5649054	7/15/97	Oomen et al.	
 5652626	7/29/97	Kawakami et al.	
5661574	08/1997	Kawana	

Examiner Signature:	Date Considered:

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 5659726	8/19/97	Sandford, II et al.	-
 5664018	09/1997	Leighton	
5666487	09/1997	Goodman et al.	
5664018	09/1997	Leighton	
 5663766	9/2/97	Sizer, II	
5671277	9/23/97	Ikenoue et al.	
5689623	11/18/97	Pinard	
5709932	1/20/98	Glez et al.	
5710834	1/20/98	Rhoads	
5710834	1/20/98	Rhoads	
5712920	1/27/98	Spille	
4723149	02/1998	Harada	
5719984	2/17/98	Yamagata et al.	
 5721788	2/24/98	Powell et al.	
 5727092	3/98	Sandford, II et al.	
5731880	3/24/98	Takaragi et al.	
 5737025	4/7/98	Dougherty et al.	
 5739864	4/14/98	Copeland	
5745604	4/28/98	Rhoads	
 5745604	4/28/98	Rhoads	
5748763	5/5/1998	Rhoads	
5748783	5/5/98	Rhoads	
5748783	5/5/98	Rhoads	
 5764763	6/9/98	Jensen et al.	
 5768426	6/16/98	Rhoads	
5768426	6/16/98	Rhoads	
5774452	6/30/98	Wolosewicz	
 5778102	7/98	Sandford, II et al.	
 5790932	8/98	Komaki et al.	
 5790932	8/4/98	Komaki .	
 	9/15/98	Powell et al.	
 5809160		Powell et al.	
 5809160	9/15/98		
5832119	11/98	Rhoads	
 5841886	11/24/98	Rhoads	
 5841978	11/24/98	Rhoads	
 5841886	11/24/98	Rhoads	<u> </u>
 5841978	11/24/98	Rhoads	
 5845008	12/1/98	Katoh et al.	<u> </u>
 5850481	12/15/98	Rhoads	ļ
 5850481	12/15/98	Rhoads	I

Examiner Signature:	Date Considered:

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	5857038	1/5/99	Owada et al.	

	5862260 5862260	1/19/99 1/19/99	Rhoads Rhoads	
	5872589	2/16/99	Morales	
	···-	4/6/99		
	5893101		Balogh et al.	
	5907443	5/25/99	Hirata	
	5949903	9/7/99	Outa et al.	
	5960151	9/28/99	Takahashi	
	5982977	11/9/99	Naruse et al.	
	5991500	11/23/99	Kanota et al.	
	6026193	2/00	Rhoads	
·····	6086706	7/11/00	Brassil et al.	
	6111954	8/29/00	Rhoads	
	6430302	8/6/02	Rhoads	
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		Foreign Patent D	ocuments	
	2943436	5/7/81	DE	
	3806411	9/1989	DE	
	0058482	8/25/82	EPC	
	0366381	5/1990	EPC	
	0411232	2/1991	EPC	
	0418964	3/1991	EPC	
	0441702	8/1991	EPC	
	0551016	2/28/92	EPC	
	0565947	10/20/93	EPC	
· · · · · · · · · · · · · · · · · · ·	0605208	7/1994	EPC	
	0618723	5/16/01	EPC	
	0629972	12/21/94	EPC	
	0642060	3/8/95	EPC	0.
	0649074	4/1995	EPC	
	0650146	4/1995	EPC	
,	0651554	5/3/95	EPC	
	0690595	2/17/99	EPO	
	0705025	4/1996	EPC	
	2063018	5/28/81	GB	
-	2067871	7/1981	GB	
	2104701	3/9/83	GB	+
	2196167	4/20/88	GB	

Examiner Signature:	Date Considered:

^{*}Examiner: Initial if considered, whether or not in conformance with MPEP 609; draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



Docket: P0854	Ser. No. 10/617,571
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2204984	11/1988	GB	
4-248771	9/4/92	JР	
5-242217	9/1993	JP	
89/08915	9/21/89	WO	
92/19073	10/29/92	WO	
93/25038	12/1993	WO	
95/10835	4/1995	WO	
95/14289	5/1995	WO .	
95/20291	7/27/95	WO	
96/26494	8/1996	WO	
96/27259	9/6/96	WO	
97/02522	1/23/97	WO	

Other References		
Ex'r Initial	Cite	
	Andersen, R., "Stretching the Limits of Steganography," Cambridge University, May 30, 1990.	
	Arachelian, "White Noise Storm," April 11, 1994, Internet reference, 13 pages.	
	Arazi, et al., "Intuition, Perception, and Secure Communication," IEEE Transactions on Systems, Man, and Cybernetics, Vol. 19, No. 5, September/October 1989, pp. 1016-1020.	
	Arthur, "Digital Fingerprints Protect Artwork," New Scientist, November 12, 1994, p. 24.	
	Aura, "Invisible Communication," Helskinki University of Technology, Digital Systems Laboratory, Nov. 5, 1995, 13 pages.	
	Bender et al., "Techniques for Data Hiding," Massachusetts Institute of Technology, Media Laboratory, Draft Preprint, April 13, 1995, 10 pages.	
	Bender, Techniques for Data Hiding," Proc. SPIE, Vo. 2420, February 9, 1995, pp. 164-173	
	Blankenhorn, D., "NABCyphertech Starts Anti-Piracy Broadcast Tests," Newsbytes, NEW03230023, Mar. 23, 1994.	
	Boland et al, "Watermarking Digital Images for Copyright Protection," Fifth International Conference on Image Processing and its Applications, Conference Date Jul. 4-6, 1995, Conf. Publ. No. 410, p. 326-330.	
	Boneh, "Collusion-Secure Fingerprinting for Digital Data," Department of Computer Science, Princeton University, 1995, 31 pages.	
	Boney et al., Digital Watermarks for Audio Signals," Proceedings of Multimedia '96, 1996 IEEE, PP. 473-480.	
	Boucqueau et al. Equitable Conditional Access and Copyright Protection for Image Based on Trusted Third Parties, Teleservices & Multimedia Communications, 2nd Int. Cost 237 Workshop, Second International Cost 237 Workshop, Nov., 1995; published 1996, pp. 229-243.	
	Brassil et al., "Hiding Information in Document Images," Nov., 1995, 7 pages.	

Examiner Signature:	Date Considered:		
*Examiner: Initial if considered, whether or not in conformance with MPEP 609; draw line through cite if			
not in conformance and not considered. Include copy of this	form with next communication to applicant.		

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INFORMATION DISCLOSURE STATEMENT

Docket: P0854	Ser. No. 10/617,571
Applicant: Rhoads	
Filed: July 11, 2003	Group: 2621

Brassil et al., "Electronic Marking and Identification Techniques to Discourage Document Copying," Proceedings of INFOCOM '94 Conference on Computers, pp. 1278-1287, Jun. 12-16, 1994 (presented at IEEE Communications Society Conference).
Brown, "S-Tools for Windows, Version 1.00; What is Steganography," Internet reference, March 6, 1994, 6 pages.
Bruckstein, A.M.; Richardson, T.J., A holographic transform domain image watermarking method, Circuits, Systems, and Signal Processing vol.17, no.3 p. 361-89, 1998. This paper includes an appendix containing an internal memo of Bell Labs, which according to the authors of the paper, was dated September 1994.
Bruyndonckx et al., "Spatial Method for Copyright Labeling of Digital Images," preprint dated 1994; published in IEEE Workshop on Nonlinear Images/Signal Processing, Thessaloniki, Greece, June 1995, Proceedings, pp. 456-459.
Bruyndonckx et al., "Neural Network Post-Processing of Coded Images Using Perceptual Masking," Proceedings of IEEE Workshop on Nonlinear Images/Signal Processing (Thessaloniki, Greece), pp. 456-459, Jun. 1995 (preprint c. 1994).
Burgett et al., "A Novel Method for Copyright Labeling Digitized Image Data," requested by e-mail from author (unavailable/password protected on IGD WWW site); received Sep. 18, 1995, 12 pages
Caronni, "Assuring Ownership Rights for Digital Images," Published in the Proceedings of 'Reliable IT Systems,' VIS '95, HH. Brüggemann and W. Gerhardt-Häckl (Ed.), Vieweg Publishing Company, Germany, 1995, 6/14/94, 10 pages. (Originally published as an ETH (Zurich) Technical Report, "Ermitteln Unauthorisierter Verteiler von Maschinenlesbaren Daten," 8/93
Caruso, "Digital Commerce, 2 plans for watermarks, which can bind proof of authorship to electronic works." New York Times, Aug. 7, 1995, one page.
Castro et al., "Registration of Translated and Rotated Images Using Finite Fourier Transforms," IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. PAMI-9, No. 5, September 1987, pp. 700-703.
Choudhury et al., "Copyright Protection for Electronic Publishing over Computer Networks," IEEE Network Magazine (18 pages), Jun. 1994.
Clarke, "Invisible Code Tags Electronic Images," Electronic Engineering Times, Jun. 12, 1995, n. 852, p. 42.
Cox et al., "Secure Spread Spectrum Watermarking for Multimedia," NEC Research Institute Technical Report, Dec. 5, 1995, 33 pages.
Cox et al., "A Secure, Imperceptable Yet Perceptually Salient, Spread Spectrum Watermark for Multimedia," IEEE, Southcon/96, Conference Record, Pp. 192-197, 1996.
Cyphertech Systems, Inc., "Broadcast Monitoring Technology," Promotional Brochure, Nov. 1992 (4 pages).
Dautzenberg, "Watermarking Images," Department of Microelectronics and Electrical Engineering, Trinity College Dublin, 47 pages, October 1994.
Delaigle et al., "A Psychovisual Approach for Digital Picture Watermarking," preprint dated 1995, 20 pages, published in Journal of Electronic Imaging, Vol. 7, no. 3, July 1998, pp. 628-640.
Digimarc presentation at RSA Conference, approximately Jan. 17, 1996, 4 pages.
Fitzgerald, "Invisible Digital Copyright ID," Editor & Publisher, June 25, 1994, p. 62.

Examiner Signature:	Date Considered:
+F : Triainlife and A shaharan A in a famous	with MDED 600, down line through site if



Docket: P0854 Ser. No. 10/617,571	
Applicant: Rhoads	
Filed: July 11, 2003	Group: 2621

Franz et al., "Computer Based Steganography: How It Works and Why Therefore Any Restrictions on Cryptography are Nonsense, at Best," Information Hiding, First Int. Workshop Proc, May 30-June 1, 1996, pp. 7-21, (a counterpart was published in German by Steffen Moller et al in 1994).
Frequently Asked Questions About Digimarc Signature Technology, Aug. 1, 1995, HTTP://WWW.DIGIMARC.COM, 9 pages.
Friedman, "The Trustworthy Digital Camera: Restoring Credibility to the Photographic Image," IEEE Transactions on Consumer Electronics, vol. 39 no. 4 pp. 905-910, Nov. 1993.
Gabor, et al., "Theory of Communication," J. Inst. Elect. Eng. 93, 1946, pp. 429-441.
 Gerzon, M.A., et al, "A High-Rate Buried-Data Channel for Audio CD," Journal of the Audio Engineering Society, Vol.43, No. 1-2, p. 3-22, Jan. – Feb., 1995.
Hartung et al., Digital Watermarking of Raw and Compressed Video, Proc. SPIE 2952, Digital Compression Technologies and Systems for Video Communications, Oct., 1996, pp 205-213.
Hecht, "Embedded Data Glyph Technology for Hardcopy Digital Documents," SPIE Vol 2171, 2/94, pp. 341-352.
Highwater FBI Ltd., "Copyright Protection for Digital Images, Digital Fingerprinting from FBI," brochure (4 pages), 1995.
Hollywood Reporter, "Cyphertech Systems: Introduces Digital Encoding Device to Prevent TV Piracy," p. 23, Oct. 20, 1993.
"Holographic signatures for digital images," The Seybold Report on Desktop Publishing, Aug. 1995, one page.
Humphrey, "Stamping Out Crime," <u>Hollywood Reporter</u> , p. S48, Jan. 26, 1994.
Jain, "Image Coding Via a Nearest Neighbors Image Model," IEEE Transactions on Communications, Vol. COM-23, No. 3, March 1975, pp. 318-331.
Johhnson, "Steganography," Dec. 10, 1995, 32 pages.
JPEG Group's JPEG Software (release 4), FTP.CSUA.BEREKELEY.EDU /PUB/CYPHERPUNKS/APPLICATIONS/ JSTEG/JPEG.ANNOUNCEMENT.GZ, 6/7/93, 2 pages.
Kassam, "Elements of Statistical Hypothesis Testing/Signal Detection in Non-Gaussian Noise," <u>Dowden & Culver</u> , pp. 1-96, 1988.
Kassam, Signal Detection in Non-Gaussian Noise, Dowden & Culver, 1988, pp. 1-96.
Koch et al., "Copyright Protection for Multimedia Data," Proc. of the International Conference on Digital Media and Electronic Publishing, December 6-8, 1994, Leeds, U.K., 15 pages.
Koch et al., "Towards Robust and Hidden Image Copyright Labeling," Proc. of 22995 IEEE Workshop on Nonlinear Signal and Image Processing, Jun. 20-22, 1995, 4 pages.
Koch et al., "Digital Copyright Labeling: Providing Evidence of Misuse and Tracking Unauthorized Distribution of Copyrighted Materials," Oasis Magazine, Dec. 1995, 3 pages.
Komatsu et al., "Authentication System Using Concealed Image in Telematics," Memoirs of the School of Science & Engineering, Waseda Univ., No. 52, 1988, pp. 45-60.
Komatsu et al., "A Proposal on Digital Watermark in Document Image Communication and Its Application to Realizing a Signature," Electronics and Communications in Japan, Part I, vol. 73, No. 5, 1990, pp. 22-23.

Examiner	Signature:				Date (Cons	ider	ed:				
		 	 	 	 				 	 _	_	



Docket: P0854	Ser. No. 10/617,571				
Applicant: Rhoads					
Filed: July 11, 2003	Group: 2621				

Kurak et al., "A Cautionary Note On Image Downgrading," November 30, 1992 IEEE, pp. 153-
159.
 Luc, "Analysis of Spread Spectrum System Parameters for Design of Hidden Transmission," Radioengineering, vol. 4, No. 2, Jun. 1995, pp. 26-29.
Machado, "Announcing Stego 1.0a2, The First Steganography Tool for the Macintosh," Internet reference, November 28, 1993, 3 pages.
Macq, "Cryptology for Digital TV Broadcasting," Proceedings of the IEEE, vol. 83, No. 6, Jun. 1995, pp. 944-957.
Matthews, "When Seeing is Not Believing," New Scientist, pp. 13-15, Oct. 16, 1993.
Möller, et al., "Rechnergestutzte Steganographie: Wie sie Funktioniert und warum folglich jede Reglementierung von Verschlusselung unsinnig ist," (with English abstract), Datenschutz und Datensicherung, 18/6 (1994) 318-326.
Nakamura et al., "A Unified Coding Method of Image and Text Data Using Discrete Orthogonal Transform," Systems and Computers in Japan, Vol. 21, No. 3, 1990, pp. 87-92.
Nakamura et al., "A Unified Coding Method of Dithered Image and Text Data Using Micropatterns," Electronics and Communications in Japan, Part 1, Vol. 72, No. 4, 1989, pp. 50-56.
New Product Information, "FBI at AppleExpo" (Olympia, London), Nov., 1995, 2 pages.
Oomen, A. et al, "A Variable-Bit Rate Buried-Data Channel for Compact Disc," Journal of the Audio Engineering Society Vol. 43, No. 1-2, pp. 23-28, Jan. – Feb., 1995
Oruanaidh et al., "Watermarking Digital Images for Copyright Protection," http://www.kalman.mee.tcd.ie/people/jjr/eva.sub pap.html, Feb. 2, 1996, 8 pages. (Also published Aug., 1996, IEE Proceedings-Vision, Image and Signal Processing, vol. 143, no. 4, pp. 250-256.).
Pennebaker et al., JPEG Still Image Data Compression Standard, Chapter 3, "Aspects of the Human Visual System," pp. 23-27, 1993, Van Nostrand Reinhold, New York.
Pickholtz et al., "Theory of Spread-Spectrum Communications - A Tutorial," Transactions on Communications, Vol. COM-30, No. 5, May, 1982, pp. 855-884.
Pitas et al., "Applying Signatures on Digital Images," IEEE Workshop on Nonlinear Image and Signal Processing, Neos Marmaras, Greece, pp. 460-463, Jun., 1995.
Port, "Halting Highway Robbery on the Internet," Business Week, p. 212, Oct. 17, 1994.
Proudler, Graeme J., "Authentication and Display of Signatures on Electronic Documents," 2244 Research Disclosure, February, 1994, No. 358, Emsworth, GB, 1 page.
Quisquater, J., "Access Control and COpyright Protection for Images, Conditional Access and Copyright Protection Based on the Use of Trusted Third Parties," 1995, 43 pages.
Quisquater, J., et al., "Access Control and Copyright Protection for Images, WorkPackage 3: Evaluation of Existing Systems" (68 pages), Apr. 19, 1995.
Quisquater, J., et al., "Access Control and Copyright Protection for Images, WorkPackage 8: Watermarking" (46 pages), Jun. 30, 1995.
Quisquater, J., et al., "Access Control and Copyright Protection for Images, WorkPackage 1: Access Control and Copyright Protection for Images Need Evaluation," Jun., 1995, 21 pages.
Rindfrey, "Towards an Equitable System for Access Control and Copyright Protection in Broadcast Image Services," <u>Proc. of the Conference on Intellectual Property Rights and New Technologies</u> , R. Oldenbourg Verlag (Wien, München), Aug. 21, 1995.

Examiner Signature:	Date Considered:							



Docket: P0854	Ser. No. 10/617,571				
Applicant: Rhoads					
Filed: July 11, 2003	Group: 2621				

Roberts, "Picture Coding Using Pseudorandom Noise," IRE Trans. on Information Theory, Vol. 8, No. 2, Feb., 1962, pp. 145-154.
Sandford II, et al., "The Data Embedding Method," SPIE vol. 2615 pp. 226-59, Oct. 23, 1995.
Sapwater et al., "Electronic Copyright Protection," PHOTO>Electronic Imaging, Vol. 37, No. 6, 1994, pp. 16-21.
Schneier, "Digital Signatures, Cryptographic Algorithms Can Create Nonforgeable Signatures for Electronic Documents, Making Them Valid Legal Instruments," <u>BYTE</u> , pp. 309-12, Nov. 1993.
Schreiber et al., "A Compatible High-Definition Television System Using the Noise-Margin Method of Hiding Enhancement Information," SMPTE Journal, December 1989, pp. 873-879.
shaggy@phantom.com, "Hide and Seek v. 4.0," Internet reference, April 10, 1994, 3 pages.
Sheng et al., "Experiments on Pattern Recognition Using Invariant Fourier-Mellin Descriptors," Journal of Optical Society of America, Vol. 3, No. 6, June, 1986, pp. 771-776.
Short, "Steps Toward Unmasking Secure Communications," International Journal of Bifurcation and Chaos, Vol. 4, No. 4, 1994, pp. 959-977.
Simmons, "Subliminal Channels; Past and Present," ETT, Vol. 5, No. 4, July-August 1994, pp. 45-59.
Sklar, "A Structured Overview of Digital Communications - a Tutorial Review - Part I," IEEE Communications Magazine, August, 1983, pp. 1-17.
Sklar, "A Structured Overview of Digital Communications - a Tutorial Review - Part II," IEEE Communications Magazine, October, 1983, pp. 6-21.
"Steganography," Intellectual Property and the National Information Infrastructure The Report of the Working Group on Intellectual Property Rights, Sep. 1995, pp. 212-213.
Szepanski, "Binary Data Transmission Over Video Channels with Very Low Amplitude Data Signals," Fernseh- und Kino-Technik, Vol.32, No.7, July, 1978, pp. 251-256. (German text with full English translation.)
Szepanski, Additive Binary Data Transmission for Video Signals," Conference of the Communications Engineering Society, 1980, NTG Technical Reports, volume 74, pp. 343-351. (German text with full English translation.)
Szepanski, "Compatibility Problems in Add-On Data Transmission for TV-Channels," 2d Symp. and Tech. Exh. On Electromagnetic Compatibility, June 28, 1977, pp. 263-268.
Szepanski, "Optimization of Add-On Signals by Means of a Modified Training Algorithm for Linear Classifiers," IEEE Int'l Symp. On Info. Theory, October 10, 1977, pp. 27-28.
Tanaka et al., "A Visual Retrieval System with Private Information for Image Database," International Conference on DSP Applications and Technology, October 1991, pp. 415-421.
Tanaka, "Embedding the Attribute Information Into a Dithered Image," Systems and Computers in Japan, Vol. 21, No. 7, 1990, pp. 43-50.
Tanaka et al., "Embedding Secret Information Into a Dithered Multi-Level Image," Proc. IEEE Military Comm. Conf., Sept. 1990, pp. 216-220.
Tanaka et al., "New Integrated Coding Schemes for Computer-Aided Facsimile," Proc. IEEE Int'l Conf. on Sys. Integration, April 1990, pp. 275-281.
Ten Kate, W.R., et al., "A New Surround-Stereo-Surround Coding Technique", Philips Research Laboratories, The Netherlands, May, 1992.

Examiner Signature:	Date Considered:



Docket: P0854	Ser. No. 10/617,571
Applicant: Rhoads	
Filed: July 11, 2003	Group: 2621

Tirkel et al., "A Two-Dimensional Digital Watermark" <u>DICTA '95</u> , Univ. of Queensland (Brisbane), pp. 378-83, Dec. 6-8, 1995.
Toga et al., "Registration Revisited," Journal of Neuroscience Methods, 48 (1993), pp. 1-13.
van Schyndel et al., "A Digital Watermark," Proc. IEEE Int. Conf. on Image Processing, Nov., 1994, pp. 86-90.
Wagner, "Fingerprinting," 1983 IEEE, pp. 18-22.
Wall Street Journal, "Foiling Card Forgers With Magnetic 'Noise,'" Feb. 8, 1994.
Walton, "Image Authentication for a Slippery New Age," <u>Dr. Dobb's Journal</u> , April 1995, pp. 18-26, 82-87.
Wasserman, Broadcast Monitoring Technology by Cyphertech Systems Inc. (untitled speech transcript), Worldwide Symp. on the Impact of Digital Tech. On Copyright & Neighboring Rights (Cambridge, MA), Apr. 2, 1993 (5 pages).
Weber et al., "Correlative Image Registration," Seminars in Nuclear Medicine, Vol XXIV, No. 4 (October), 1994, pp. 311-323.
Wise, "The History of Copyright, Photographers' Rights Span Three Centuries," <u>PHOTO:</u> <u>Electronic Imaging</u> , vol. 37 no. 6, 1994.

Examiner Signature:	Date Considered:	